Claims

1. Method for manufacturing menthol by catalytic hydration of starting materials having the carbon network of menthane with at least one double bond and which are substituted in 3-position by oxygen and/or catalytic rearrangement of stereoisomers of the menthol in the presence of hydrogen, characterised in that the reaction is performed in the presence of a nickel catalyst doped with iron and/or chromium and at a temperature in the range 80-230°C and hydrogen pressures in the range 1-200 bar abs.

2. Method according to Claim 1, characterised in that the iron- or chromium-doped nickel catalysts have an iron or chromium content of between 0.1 and 20% by weight in relation to the dry catalyst.

3. Method according to Claim 1 or 2, characterised in that the nickel catalyst in the dry state has an iron content of 0.1-20% by weight, a chromium content of 0.1-20% by weight, a nickel content of 60-95% by weight and an aluminium content of 1-20% by weight.

4. Method according to at least one of Claims 1 to 3, characterised in that the nickel catalyst in the dry state has an iron content of 0.1-10% by weight, a chromium content of 0.1-10% by weight, a nickel content of 80-93% by weight and an aluminium content of 3-10% by weight.

5. Method according to at least one of Claims 1 to 4, characterised in that the method is essentially performed without diluent.

6. Method according to at least one of Claims 1 to 5, characterised in that the weight ratio between the dry nickel catalyst and the starting materials is in the range 0.001 – 0.1 : 1.

7. Method according to at least one of Claims 1 to 6, characterised in that the reaction temperature is between 120 and 210°C.

8. Method according to at least one of Claims 1 to 7, characterised in that the method is performed discontinuously.

9. Method according to Claim 8, characterised in that the hydrogen pressure is between 3 and 50 bar abs.